

Amendments to the Claims

The following listing of the claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-13 (canceled)

Claim 14 (Previously presented). A method of cyclizing a substrate capable of being cyclized by an elisabethatriene cyclase, the method comprising the step of: contacting the substrate with a purified elisabethatriene cyclase under reaction conditions that result in cyclization of the substrate, wherein the purified elisabethatriene cyclase comprises the amino acid sequences of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, and SEQ ID NO:5, and has the following characteristics: (A) an apparent molecular weight of about 47,000 Da; (B) an isoelectric point of about 5.1; and (C) the ability to cyclize geranyl geranyl diphosphate, and

wherein the substrate is selected from the group consisting of: geranyl geranyl diphosphate, a geranyl geranyl diphosphate analogue, 3-phenyl-3-desmethylgeranylgeranyl diphosphate, farnesyl diphosphate (FPP), FPP isomers, and FPP analogues, and a phosphoisooprenoid.

Claim 15 (Previously presented). The method of claim 14, wherein the substrate is geranyl geranyl diphosphate (GGPP).

Claim 16 (Previously presented). The method of claim 14, wherein the substrate is selected from the group consisting of: 3-phenyl-3-desmethylgeranylgeranyl diphosphate, farnesyl diphosphate (FPP), FPP isomers, and FPP analogues.

Claim 17 (Previously presented). The method of claim 14, wherein the substrate is a phosphoisoprenoid.

Claim 18 (Previously presented). The method of claim 14, wherein the step of contacting the substrate with a purified elisabethatriene cyclase is performed as part of a method for producing a pseudopterosin.

Claim 19 (Previously presented): The method of claim 14, wherein the step of contacting the substrate with a purified elisabethatriene cyclase results in the production of elisabethatriene.

Claims 20 -21 (Canceled).